

WEST**End of Result Set**

Generate Collection

Print

L1: Entry 1 of 1

File: USPT

Mar 4, 1997

US-PAT-NO: 5608152

DOCUMENT-IDENTIFIER: US 5608152 A

TITLE: Seed-specific transcriptional regulation

DATE-ISSUED: March 4, 1997

INVENTOR-INFORMATION:

| NAME | CITY | STATE | ZIP CODE | COUNTRY |
|----------------|-------|-------|----------|---------|
| Kridl; Jean C. | Davis | CA | | |
| Knauf; Vic C. | Davis | CA | | |

US-CL-CURRENT: 800/306; 435/320.1, 536/24.1

CLAIMS:

What is claimed is:

1. A Brassica plant comprising:

a DNA construct comprising, in the 5' to 3' direction of transcription, a transcriptional initiation region from a gene that encodes a product preferentially expressed in a plant seed cell as compared to other plant cells, a DNA sequence of interest other than the native coding sequence of said gene, and a transcriptional termination region, wherein said gene is a napin gene, an acyl carrier protein gene or an EA9 gene.

2. The Brassica plant according to claim 1, wherein said DNA construct further comprises a translational initiation region immediately downstream of said transcriptional initiation region.

3. The Brassica plant according to claim 1 wherein said DNA sequence of interest comprises an open reading frame that encodes a peptide.

4. The Brassica plant according to claim 1, wherein said DNA sequence of interest is complementary to an mRNA endogenous to a plant seed cell.

5. The Brassica plant according to claim 1, wherein said transcriptional initiation region is from a gene expressed in a Brassica seed cell.

6. The Brassica plant according to claim 1, wherein said transcriptional initiation region is obtainable from a DNA selected from the group consisting of DNA depicted in SEQ ID NO:1, SEQ ID NO:2, SEQ ID NO:4 and SEQ ID NO:9.

7. The Brassica plant according to claim 1, wherein said transcriptional termination region is native with the transcriptional initiation region.

8. A Brassica seed comprising:

a DNA construct comprising, in the 5' to 3' direction of transcription, a transcriptional initiation region from a gene that encodes a product preferentially expressed in a plant seed cell as compared to other plant cells, a DNA sequence of interest other than the native coding sequence of said gene, and a transcriptional termination region, wherein said gene is a napin gene, an acyl carrier protein gene or an EA9 gene.

9. The Brassica seed according to claim 8 wherein said DNA construct further comprises a translational initiation region immediately downstream of said transcriptional initiation region.

10. Brassica seed according to claim 8, wherein said DNA sequence of interest comprises an open reading frame that encodes a peptide.

11. The Brassica seed according to claim 8, wherein said DNA sequence of interest is complementary to an mRNA endogenous to a plant seed cell.

12. The Brassica seed according to claim 8, wherein said transcriptional initiation region is from a gene expressed in a Brassica seed cell.

13. The Brassica seed according to claim 8, wherein said transcriptional initiation region is obtainable from a DNA selected from the group consisting of DNA depicted in SEQ ID NO:1, SEQ ID NO:2, SEQ ID NO:4 and SEQ ID NO:9.

14. The Brassica seed according to claim 8, wherein said transcriptional termination region is native with the transcriptional initiation region.